APPENDIX B - DEFINITIONS

- **Aboveground Storage Tank System** A tank or combination of tanks, including the pipes that are connected to the tank(s) or ancillary equipment containment systems, which is, was, or may have been used to contain liquids and with less than 10% of its volume beneath the surface of the ground, including the volume of the underground pipes that are connected to the tank(s).
- **Act 451** Michigan's Natural Resources and Environmental Protection Act, Public Act 451 of 1994, as amended. The Act codified nearly 200 former state environmental statutes.
- **Accumulation Date** The date hazardous waste is first put into a storage container, or if a satellite container, then it is the date the container exceeded the allowable amount.
- **Administratively Complete** Having the minimum amount of information required for the submittal, which may or may not be stipulated on the form or application.
- **Acute Hazardous Waste** A hazardous waste that has been found to be fatal to humans in low doses, or that is capable of causing or significantly contributing to an increase in serious irreversible, or incapacitating reversible, illness.
- **Annual Wastewater Report** Also called the Critical Materials and Wastewater Report. All businesses in Michigan that discharge nonsanitary wastewater must submit this report annually to the Environmental Science and Services Division of the DEQ.
- Attainment Area Geographic area considered to have air quality as good as or better than the National Ambient Air Quality Standards as defined in the Clean Air Act. An area can be an attainment area for one pollutant and a nonattainment area for other pollutants.
- Baseline Data Information gathered and recorded in units such as pounds bought, gallons used, or dollars spent, at or before the beginning of a change to allow measurement of the improvement. For example: in 1993 a company sent 2000 cubic yards of scrap material to landfill; after initiating a paper recycling program in 1994, they now send 500 cubic yards of materials to landfill every year. Using 1993 landfill information as their baseline data, they have reduced their landfilled materials by 1500 cubic yards. Since their landfill charges \$2.88/cu.yd, the company determined they now save \$4320/year in landfill costs.
- **Baseline Environmental Assessment (BEA)** An evaluation of environmental conditions which exist at a facility at the time of purchase, occupancy, or foreclosure that reasonably defines the existing conditions and circumstances at the facility so that, in the event of a subsequent release, there is a way to distinguish the new release from existing conditions.

- **Biennial Report** A report that Large Quantity Generators and Treatment, Storage, and Disposal Facilities must submit to EPA every even-numbered year.
- Bioaccumulate The process in which toxic chemicals accumulate in living tissue.
- **Biochemical Oxygen Demand (BOD)** A standardized means of estimating the degree of contamination of water. Decomposing organic matter uses dissolved oxygen, thus removing it from use by aquatic organisms.
- **Brainstorming** A session where unrestrained ideas are offered by the participating group within a subject area. This could include identifying waste sources, pollution prevention opportunities, or solutions to eliminate or reduce a specific waste.
- **Business Identification Number** refers to your waste generator identification number which will be your MID number and/or your EPA ID number.
- **Carbon Monoxide (CO)** Colorless, odorless, poisonous gas produced by incomplete fuel combustion.
- Carcinogenic Cancer causing.
- **Certificate of Coverage** Document identifying coverage under a general permit to a specific business location.
- **Characteristic Waste** A hazardous waste that exhibits at least one of the five characteristics identified in the state and federal regulations: ignitable, corrosive, reactive, toxic, or severely toxic.
- **Chlorinated Solvent** An organic solvent that contains the element chlorine. It is one type of halogenated solvent.
- **Chlorofluorocarbon (CFC)** A complex organic compound used in air conditioning.
- **Class I Liquid** A flammable liquid having a flash point below 100° F, and having a vapor pressure not exceeding 40 psia at 100° F.
- Class II Liquid A combustible liquid with a flash point at or above 100° F and below 140° F.
- Class IIIA Liquid A combustible liquid with a flash point at or above 140° F and below 200° F.
- **Clean Air Act (CAA)** A federal law, most recently amended in 1990, that regulates sources of air contaminants in the United States. The Air Quality Division of the DEQ implements and enforces this law in Michigan.

- Clean Air Assistance Program (CAAP) A program developed in accordance with the Clean Air Act to help small businesses (100 or less employees) understand their obligations under state and federal air quality laws and identify methods to comply with those requirements. It is located in the Environmental Science and Services Division of the DEQ.
- **Clean Water Act (CWA)** A federal law, most recently amended in 1987, that regulates water quality. This includes discharges to the surface waters and groundwaters of the United States. The Water Division of the DEQ implements and enforces this law in Michigan.
- **Cleanup Criteria** Calculations used to determine the amount of cleanup required at a site of environmental contamination. Michigan's cleanup criteria use standard assumptions about expected on-site activities, possible exposure routes, and the amount of time people may be spending on the contaminated property.
- **Combustible Liquid** A liquid having a flashpoint at or above 100° F.
- Community Right to Know see SARA Title III.
- Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) A federal law passed in 1980 and amended in 1986 by the Superfund Amendments and Reauthorization Act (SARA). The acts created a special tax that goes into a trust fund, commonly known as Superfund, to investigate and cleanup abandoned or uncontrolled hazardous waste sites. The Act is administered by the U.S. Environmental Protection Agency (EPA) in cooperation with the individual states.
- **Contingency or Emergency Plan** A plan that describes what facility personnel will do if there is a fire, explosion, or release of a hazardous substance.
- **Corrosive** Dissolves metals or burns skin; pH less than or equal to 2.0, or greater than or equal to 12.5.
- **Critical Materials** Materials that appear on the Critical Materials Register because they have been determined to be of high environmental or human health concern.
- **Critical Materials Register (CMR)** A list of critical materials compiled by the DEQ. It can be obtained from the Water Division of the DEQ.
- **Critical Materials and Wastewater Report** A report that is required by Part 31 of Act 451 to be filed annually with the Environmental Science and Services Division of the DEQ by businesses discharging nonsanitary wastewater in Michigan.
- **Dike** A low wall that can act as a barrier to prevent a spill from spreading. One method of secondary containment.
- **Drain** -(1) a pipe designed to convey fluids to another place, such as a sink or floor drain. (2) a surface ditch or county drain designed to convey water, especially storm water, to a lake, river, or stream.

- **Dry Cell Batteries** Types of batteries used to power portable power tools, flashlights, calculators, and other equipment. The term "drycell" refers to the type of electrolyte contained in the batteries.
- **Due Care** Owners or operators of contaminated property must undertake response activities necessary to mitigate unacceptable exposure to hazardous substances and allow for the intended use of the property in a manner that protects the public health and safety.
- **Emission** Air contaminants discharged into the atmosphere from stacks, vents, surface areas, etc.
- **Environmental Assistance Center (EAC)** An information and help program that is housed in the Environmental Science and Services Division of the DEQ. Staff are available to answer questions or make referrals regarding non-emergency environmental issues handled by the state.
- Environmental Protection Agency (EPA) See U.S. Environmental Protection Agency.
- **EPA Identification Number** A number assigned by the Waste and Hazardous Materials Division of the DEQ to hazardous waste generators.
- **EPA Region V** The U.S. EPA has 10 regional offices in the country. Region 5, with headquarters in Chicago, includes Michigan, Illinois, Indiana, Minnesota, Ohio, and Wisconsin.
- **Extremely Hazardous Substance** Any of over 400 chemicals listed according to Section 302 of SARA Title III in 40 CFR Part 355, Appendices A and B.
- **Facility** The area, place, or property of a business. As defined in Parts 201 and 213 The area, place, or property where a hazardous substance has been released, deposited, disposed of, or otherwise comes to be located, and the hazardous substance is in excess of the concentrations which satisfy the residential criteria of Part 201 or the cleanup criteria for unrestricted use under 213.
- **Flammable Liquid** A liquid having a flash point below 100° F and having a vapor pressure not exceeding 40 psia at 100° F. Also known as a Class I liquid. Hazardous waste regulations define it as liquids with flash point below 140° F.
- Flash Point The temperature at which material spontaneously combusts.
- Floor Drain A drain anywhere on the floor that collects runoff inside the facility.
- **Free Liquid** Liquids that readily separate from the solid portion of the waste at ambient temperature and pressure.

- **General Permit** A permit issued for a category of similar sources, processes, process equipment, or discharge situations. General Permits are issued by the Water Division for certain types of discharges to the water, and by the Air Quality Division for emissions to the air.
- **Groundwater** The supply of water found beneath the earth's surface, usually in aquifers, which is a source of water for wells and springs.
- **Groundwater Discharge** The introduction of a substance, including liquid waste, to the groundwater through seepage ponds, underground septic systems, or by applying directly on the ground where the substance seeps downward into the groundwater.
- **Groundwater Monitoring** A method used to determine water quality that uses wells to sample and measure or detect the presence of pollution in the groundwater.
- **Halogen** A specific group of chemical elements. Halogenated compounds are those containing the element or fluorine, chlorine, bromine, iodine, or astatine and are strictly regulated.
- **Halogenated Solvent** An organic solvent that contains one of the halogen elements.
- **Hazardous Air Pollutant (HAP)** A chemical that is listed in Section 112 of the Clean Air Act because it has been determined to cause serious health and adverse environmental effects.
- **Hazardous Material** Material presenting dangers beyond the fire problems relating to flash point and boiling point. These dangers may arise from, but are not limited to, toxicity, reactivity, instability, or corrosively.
- **Hazardous Substance** A chemical that is listed according to CERCLA in 40 CFR Part 302, Table 302.4. Hazardous air pollutants are included as hazardous substances.
- **Hazardous Waste** A waste material which is either listed by name or generation source on any of the Michigan and federal lists of hazardous waste, or which exhibits any of five characteristics described in Michigan and federal law: ignitable, corrosive, reactive, toxic and severely toxic.
- Hazardous Waste Operations and Emergency Response (HAZWOPER) OSHA requirements regarding properly handling hazardous materials incidents.
- **Hydrocarbons (HCs)** Compounds of carbon and hydrogen. Many HCs are defined in state and federal regulations as volatile organic compounds (VOCs) and are subject to air pollution control regulations.
- **Ignitable** Starts burning easily; liquid with a flash point below 140° F, solid that spontaneously ignites, or oxidizing material.

- **Impervious** Cannot be penetrated by liquids or contaminants. Requirement of secondary containment structures.
- **In House Recovery** Recovering materials for reuse within the business facility rather than sending them elsewhere for recovery or disposal.
- Industrial Pretreatment Program (IPP) A program for treating industrial wastewater to remove pollutants before the wastewater is discharged to a municipal treatment plant. All IPPs must be written in accordance with the federal pretreatment regulations found in 40 CFR Part 403.
- **Interstitial Monitoring** Method of release detection used for double-walled tanks that is capable of detecting a leak between the outer and inner walls of the system.
- Land Ban Notification A document that must accompany hazardous waste shipments which contains language required by federal law stating whether or not the waste is prohibited from land disposal. (Also known as Land Ban Restriction, or Land Disposal Restriction LDR)
- **Leachate** A liquid that results from water that collects contaminants as it moves through wastes.
- **Lead Acid Batteries** Type of battery used to start engines and in a variety of back-up power systems. The electrolyte is in the form of a liquid acid bath.
- **Liquid Industrial Waste** Industrial wastewater, leachate, sludge (see definition), sanitary sewer clean-out residue, storm sewer clean-out residue, grease trap clean-out residue, spill residue, used oil, or other liquid waste that is produced by, is incident to, or results from industrial or commercial activities.
- **Listed Waste** A hazardous waste that is listed by name or generation source on the federal and/or Michigan lists of hazardous waste. The lists are often referred to as "F", "K", "P", and "U lists.
- **Local Emergency Planning Committee (LEPC)** A committee established according to SARA Title III in each county and some municipalities. It is responsible for developing a comprehensive hazardous materials emergency response plan for the community.
- **Lockout/Tag Out** A specific process of protecting and labeling equipment shut down for maintenance so it cannot be accidentally started up or electrically charged.
- **Manifest** A document that accompanies and tracks waste shipments from the point of generation to the final destination/disposal.
- **Material Safety Data Sheet (MSDS)** Document that outlines information about a hazardous product or chemical, including its ingredients, health and environmental hazards, flammability, and safety precautions.

- **Michigan Air Pollution Reporting (MAPR) Forms** A group of forms sent annually by the Air Quality Division of the DEQ to selected facilities on which facility officials record operation and process information used to determine the annual emissions of air contaminants.
- Michigan Liquid Industrial Waste Generator Identification Number (MIG Number) A number assigned by the Waste and Hazardous Materials Division of the DEQ to a business that only generates liquid industrial waste or to a Conditionally Exempt Small Quantity Generator.
- **Mitigate** To make or become less severe or intense.
- National Pollutant Discharge Elimination System (NPDES) NPDES permits are issued pursuant to the Clean Water Act to control pollutant discharges from point sources into the surface waters of the United States. This program is administered in Michigan by the Water Division of the DEQ.
- National Response Center (NRC) Operated by the United States Coast Guard, this center must be contacted if there is a release of a CERCLA hazardous substance, extremely hazardous substance, or hazardous waste that threatens human health outside the generation site, or a release that reached navigable water. Any release, including oil and salt, to navigable waters must also be reported to the NRC in accordance with the Clean Water Act.
- Navigable Waters Traditionally, lakes and streams sufficiently deep and wide enough to float a log. In Michigan, the term includes any waterway declared navigable by the Michigan Supreme Court.
- **Nitrogen Oxides (NO**x) Oxides of nitrogen (except nitrous oxide) that are regulated because they can cause lung and eye irritation, can contribute to the formation of acid rain, and react in the atmosphere to form ozone and smog.
- **Nonattainment Area** Geographical area that does not meet one or more of the National Ambient Air Quality Standards as designated in the Clean Air Act.
- **Nonpoint Source** Pollution sources which are diffuse and do not have a single point of origin, or are not introduced into a receiving stream from a specific outlet. Waterborne pollutants are generally carried off the land by storm water runoff.
- **Nonsanitary Wastewater** Wastewater from business activities that might contain one or more pollutants. Also called industrial or commercial wastewater.
- **Occupational Safety and Health Administration (OSHA)** Federal agency in charge of regulations to protect workers on the job.

- **Off-Specification Used Oil** Oil used for fuel that exceeds maximum concentrations for arsenic, cadmium, chromium, lead, or total halogens or has a minimum flashpoint of 100 degrees F^o.
- **On-Site Recycling** Recycling that takes place at the facility where it is generated.
- Ozone (O₃) An unstable molecule made up of 3 atoms of oxygen. When at ground-level, it is the major component of smog, and causes harmful health and environmental effects. When in the upper atmosphere (stratosphere), it protects plants and animals from harmful UV radiation. The source of ground-level ozone is the chemical reaction of VOCs and NO_x with sunlight. Stratospheric ozone is destroyed by CFCs.
- **Permit to Install** A permit issued by the Air Quality Division of the DEQ authorizing the construction, installation, relocation, or alteration of any process, fuel-burning, refuse-burning, or control equipment in accordance with approved plans and specifications.
- **Personal Consumption** Items brought in by an individual for their personal use, such as aspirin, prescription medications, eyeglass cleaner, etc.
- **Personal Protective Equipment** Equipment worn by an individual for protection, such as safety goggles, hard hats, steeltoed shoes, ear plugs, etc.
- **pH** An indication of the acidity or alkalinity of a solution. A pH of 7 is neutral. Less than 7 is acid, with the lowest pH being the most acidic. More than 7 is alkaline (also called basic).
- **Pinch Point** Any place a moving object and a nonmoving object meet or where two constantly moving objects meet.
- **Point Source** A stationary location or fixed facility from which pollutants are discharged or emitted. Also, any single identifiable source of pollution, e.g., a pipe, ditch, ship, or factory smokestack.
- **Pollution Emergency Alerting System (PEAS)** A 24-hour hotline used to report an environmental emergency affecting air, land, or water in Michigan. The PEAS number is 1-800-292-4706.
- **Pollution Incident Response Plan (PIPP)** A state requirement under Part 31 of Act 451 for certain facilities to develop and implement a plan to prevent, control, and respond to a release to the environment.
- **Pollution Prevention (P2)** The elimination or reduction of discharges or emissions to the environment. This includes all pollution: hazardous and nonhazardous, regulated and nonregulated, across all media and from all sources.

Potential To Emit - The amount of an air contaminant that would be emitted from a process or facility if it was continuously operating at its maximum designed capacity. Emission rates that are not representative of the maximum designed capacity but are found in permit conditions can be used in determining potential ton emit.

POTW - Publically owned treatment works.

ppm - Parts per million.

Process Water - Wastewater resulting from an industrial, commercial, or municipal activity (such as a car wash and pump island wash down).

Promulgate - Formally put into effect (such as a law or rule).

Publicly Owned Treatment Works (POTW) - Also known as a municipal wastewater treatment plant or sanitary wastewater treatment plant which is operated by the local government, such as a city or township.

Reactive - Undergoes rapid or violent chemical reaction.

Receiving Water - A river, lake, stream, or other watercourse into which wastewater or treated effluent is discharged.

Release - Includes any spilling, leaking, pouring, leaching, or any other form of discharge of a regulated substance.

Remediation - A cleanup of environmental contamination.

Renewable Operating Permit (ROP) - A permit issued in accordance with Title V of the Clean Air Act. It is renewed every 5 years.

Reportable Quantity (RQ) - A threshold amount of a hazardous substance that, if released, must be reported according to CERCLA, Part 201 of Act 451, and Title III of SARA.

Responsible Officer - Person legally responsible for the outcome.

Retired Engineer Technical Assistance Program (RETAP) - A program in the Environmental Science and Services Division of the DEQ. Retired engineers, scientists, and other professionals are available to provide free, confidential, nonregulatory, and voluntary waste reduction assessments for Michigan businesses that request services.

Risk Assessment - An analysis of the potential for adverse health effects caused by a chemical(s) of concern from a site to determine the need for remedial action and to develop target levels where remedial action is required.

- **Risk-Based Corrective Action (RBCA)** A systematic, tiered approach developed by ASTM for evaluating site-specific risks associated with environmental contamination and selecting an environmentally appropriate, cost effective remedial strategy.
- **Sanitary Landfill** A licensed disposal facility that accepts commercial and residential solid waste. Also known as a Type II landfill.
- **Sanitary Wastewater** Standard household wastewater such as that from sinks, toilets, showers, and laundry. This does not include wastewater from business activities such as washing tools, draining a radiator, or washing a service bay floor.
- **SARA Title III** The part of the Superfund Amendments and Reauthorization Act which created the Emergency Planning and Community Right to Know program.
- **Satellite Containers** Containers used to store hazardous waste under limited amounts at or near the point of generation.
- **Secondary Containment** Containment, such as a dike, impoundment basin, or commercially available equipment that will capture any release from a primary containment vessel such as a tank or drum.
- **Severely Toxic Waste** Waste containing 1 ppm or more of a compound which can statistically be shown to be acutely toxic, carcinogenic, teratogenic (birth defects), or cause severe debilitating, irreversible, adverse health effects in mammals.
- **Sewer** A covered channel or conduit that carries wastewater and/or storm water runoff from the source to a treatment plant or receiving stream.
- **Sludge** A semi-solid residue. Disposal management depends on its characteristics and sources. Sludge might be considered a solid or a liquid. It is a liquid if it is pumpable or the results from the "paint filter liquids test" indicate the material is a liquid. The Waste and Hazardous Materials Division of the DEQ has information about this test.
- **Slug Loading** A relatively large release of a pollutant to a publicly owned treatment works (POTW) that when released in small quantities would not ordinarily cause a problem at the POTW.
- **Solid Waste** Includes garbage, rubbish, yard waste, ashes, incinerator ash and residue, industrial sludges, and solid commercial and industrial waste. It does not include some materials that are separated out for recycling or composting.
- **Solvent** A substance, usually liquid, that is capable of dissolving one or more other substances. Organic solvents are used in coatings and as cleaners.
- **Source Elimination** Eliminating the generation of a waste at its source.

- **Standard Industrial Classification** Federal system involving a four number designation for classifying type of industry based on product or operation.
- **State Commission (as used in SARA Title III)** All submissions to the "State Commission" are to be made to the SARA Title III office, Environmental Science and Services Division.
- **State Emergency Response Commission (SERC)** Michigan Emergency Planning and Community Right-to-Know Commission established according to SARA Title III.
- **State Permit** A groundwater discharge permit issued by the Water Division of the DEQ. Not to be confused with <u>any</u> other state issued permit.
- **Storm Water** Rainfall and snowmelt. Storm water runoff is regulated by the Clean Water Act.
- **Submerged Fill Pipe** A storage tank fill pipe with a discharge opening that is no higher than 6 inches from the bottom of the tank.
- **Substantial Harm Facility** Defined in the Clean Water Act as a facility that could reasonably be expected to cause significant and substantial harm to the environment by discharging oil or petroleum products in harmful quantities.
- Superfund Amendments and Reauthorization Act (SARA) of 1986 This federal law is an expansion of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980. It was enacted to clean up hazardous waste sites, improve local hazardous materials emergency response capabilities, and provide the public with information concerning hazardous and toxic chemicals in their community.
- **Surface Water** All water naturally open to the atmosphere, including lakes, streams, reservoirs, impoundments, rivers, wetlands, ponds, and most drains.
- **Surface Water Discharge** The introduction of a substance, including liquid waste, into the surface water either directly or indirectly via a storm sewer or drain.
- **Temporary Closure** Underground storage tank closure for up to 12 months.
- **Threshold Planning Quantity** An amount of an Extremely Hazardous Substance which, if exceeded at a facility, requires certain emergency planning activities be conducted according to Section 302 of SARA Title III.
- **Title III List of Lists** A consolidated list of chemicals subject to Title III of SARA and Title III of the Clean Air Act.
- Title V Renewable Operating Permit See Renewable Operating Permit.
- Title III of SARA See SARA Title III.

- **Tolling Arrangements** A contractual agreement where used oil is picked up from a generator, reclaimed, and returned to the same generator for use as lubricant, cutting oil, or coolant.
- **Total Halogen Concentration** Total concentration of compounds containing chlorine, bromine, fluorine, iodine, and astatine in a substance or solution. Also may refer to the test conducted to determine that concentration.
- **Toxic** Poisonous to humans and/or other organisms.
- **Toxic Characteristic Leaching Procedure (TCLP)** An EPA method for testing the potential for leaching toxic substances from soils into the groundwater.
- **Type I landfill** A hazardous waste landfill.
- Type II landfill A solid waste landfill for commercial and residential waste.
- **Type III landfill** A landfill that accepts waste not required to be disposed in a Type I or Type II landfill such as construction and demolition waste and some other industrial wastes.
- **Underground Storage Tank (UST)** A tank or combination of tanks, including underground connected piping, which are, were, or might have been used to contain a regulated substance.
- **Universal Waste** Specific hazardous wastes which can be managed in an alternative manner in place of the full application of hazardous waste regulations.
- **U.S. Environmental Protection Agency (USEPA)** Federal agency enforcing environmental regulations which are primarily contained in 40 CFR.
- **Vapor Monitoring** A method of release detection, which measures fumes from leaked product in the soil around the tank to determine if the tank is leaking.
- **Volatile Organic Compounds (VOCs)** Includes any organic compound that participates in smog-forming reactions, except for those designated by the EPA Administrator as having negligible photochemical reactivity.
- **Waste Minimization** Reducing the generation of waste at their source.
- **Waters of the State** Includes groundwaters, lakes, rivers, and streams and all other watercourses and waters within the jurisdiction of the state, and also the Great Lakes bordering the state.
- **Waterside Equipment Activities** Equipment activities that involve the use of water (not equipment that is down by the river).